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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,773	11/26/2003	Hans-Dieter Gaul	DT-6687	9658

30377 7590 11/10/2005

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EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,773	GAUL, HANS-DIETER	
	Examiner	Art Unit	
	Jennifer H. Gay	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-26 is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

2. The abstract of the disclosure is objected to because the abstract has been constructed as single run-on sentence instead of a narrative paragraph. Correction is required. See MPEP § 608.01(b).

3. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they

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must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 1, second occurrence, been renumbered as claim 3.

5. Claims 13 and 26 are objected to because of the following informalities:

- Claim 13, line 6, a comma should be added after "therefrom".
- In claim 13 there is insufficient antecedent basis for "the outer cone surface" in line 8.
- Claim 26, line 5, "he" should be changed to --the--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Cochran et al. (US 5,352,071).

Regarding claim 1: Cochran et al. discloses a tool holder for an annular core bit

24. The holder includes the following features:

- A guide member 42 located at a bit-side end of the holder.
- A hollow, freely rotatable flange 66 arranged coaxially with the guide member and having an inner thread.
- An outer cone surface 84 located inwardly of the guide member and axially spaced therefrom. The cone surface is tapered toward the bit-side of the holder.
- A torque transmitting means 44 arranged between the guide member and the outer cone surface.

Regarding claim 2: The guide member includes an outer cylindrical surface.

Regarding claim 10: The tool holder is formed as a hollow part.

Regarding claim 11: The holder includes an adapter 30.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cochran et al.

Regarding claims 3, 4: Cochran et al. discloses all of the limitations of the above claims except for the outer cone surface having a taper that has a cone angle between 10° and 15°, specifically 12.5°. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have formed the outer cone surface of Cochran et al. with a taper having a cone angle between 10° and 15°, specifically 12.5°, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 5, 6: Cochran et al. discloses all of the limitations of the above claims except for the axial center of the guide member being spaced from an axial center of the outer cone surface by a distance between 25mm and 50mm, specifically 35mm. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have formed guide member and the outer cone surface of Cochran et al. so that their axial centers were spaced by a distance between 25mm and 50mm, specifically 35mm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 8, 9: Cochran et al. discloses all of the limitations of the above claims except for the inner thread being a left-hand round thread having a diameter of

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55mm. However, it would have been an obvious matter of design choice to have formed the inner thread of Cochran et al. as a left-hand round thread having a diameter of 55mm, since applicant has not disclosed that such a thread solves any stated problem or is for any particular purpose and it appears that the invention would equally well with any typical thread.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cochran et al. in view of Schoepe (US 3,333,511).

Cochran et al. discloses all of the limitations of the above claim except for the torsion transmission means is channel or gear toothing.

Schoepe discloses a tool holder similar to that of Cochran et al. Schoepe further teaches the use of gear toothing as a torque transmission means (Figure 4).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the torque transmission means of Cochran et al. to include gear toothing as taught by Schoepe in order to have provided a secure connection between the guide member and the outer cone surface thus preventing the assembly from slipping when torque was applied to the tool.

Allowable Subject Matter

11. Claims 13-26 are allowed.

12. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

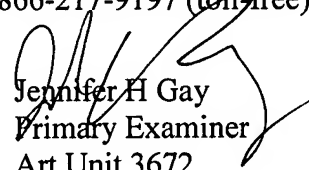
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Primary Examiner
Art Unit 3672

JHG
November 7, 2005